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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,348	06/23/2003	Pascal Audinot	TIF-33831	I230
23494	7590	10/20/2006	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED				HANNON, CHRISTIAN A
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				ART UNIT
				PAPER NUMBER
				2618

DATE MAILED: 10/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

**Application No.**

10/601,348

**Applicant(s)**

AUDINOT ET AL.

**Examiner**

Christian A. Hannon

**Art Unit**

2618

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 20 September 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1.  The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a)  The period for reply expires 3 months from the mailing date of the final rejection.  
 b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2.  The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3.  The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a)  They raise new issues that would require further consideration and/or search (see NOTE below);
  - (b)  They raise the issue of new matter (see NOTE below);
  - (c)  They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d)  They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4.  The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5.  Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.

6.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7.  For purposes of appeal, the proposed amendment(s): a)  will not be entered, or b)  will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 1-21.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

AFFIDAVIT OR OTHER EVIDENCE

8.  The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9.  The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10.  The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11.  The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.

12.  Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.

13.  Other: \_\_\_\_\_.

Continuation of 11. does NOT place the application in condition for allowance because: Applicant's arguments have been wholly considered however they fail to place the application in a condition for allowance. Applicant claims that Wildhagen fails to teach, "that the gain of the VGA is determined by the magnitude of the output of the ADC. There are no words saying that. Instead, those paragraphs always refer to the VCA output." (Page 7 of applicant's arguments). The Examiner directs the Applicant to page 2 of Wildhagen, paragraph 27, where Wildhagen states "the digital VCA output signal 9 is forwarded to the absolute value determination unit 11 which determines the magnitude 12 of said digital VCA output signal 9." At this point a digital representation of the amplified analog received radio signal is input to a gain comparator in the digital domain for ultimately producing an analog signal to control the gain output from the VCA 5 of Figure 1. The Applicant goes on to cite paragraph 7 on page 1 of Wildhagen to show this, however the detail of the Wildhagen circuit is disclosed in page 2 paragraph 27 (which is cited above), not in the Applicant's citation. Simply put, the digital representation at the output of the analog to digital converter, that which produces the digital version of the VCA output, is what is used in Wildhagen to control the gain of the VCA. Applicant's further remarks on page 8 that "Wildhagen predicates [sic] and determines a gain of his VCA by the magnitude of the INPUT to the ADC (or equivalently, the output of the VCA) and compares it to a predefined reference voltage." In fact Wildhagen shows that the output of the VCA (Item 5, Figure 1) is input to a A/D converter (Item 8, Figure 1) the output of the A/D converter then has its magnitude assessed and utilized to produce a control signal (Item 6, Figure 1) to vary the gain of the VCA (Page 2, [0027]).

Claim 7 is an analogous method claim to the apparatus Claim 1, and Claim 13 is a broader recitation of claim 1; Claims 7 and 13 are similarly rejected.

Regarding claims 2 & 8 the Applicant argues that "sometimes receivers are analog, such as the analog super heterodyne receivers or optical fiber receivers; there are no digital bits; the Examiner's statements cannot be considered obvious" The examiner commends the Applicants exercised knowledge of the super heterodyne receiver, however the Applicant is incorporating a technology which is not of relevance to the argument at hand, the Applicant's invention is to a digital radio receiver (see application specification) therefore in the scope of digital receivers the examiner maintains that it is obvious that a plurality of digital bits are required to represent a radio signal. Claims 2 and 8 maintain their rejections over Wildhagen and the Applicant Admitted Prior Art (AAPA).

Claims 11,12 & 20 being dependent on Claims 1, 8, and 13, respectively, maintain their rejections.

Claims 14-18, being dependent on Claim 13, maintain their rejections.

Claims 19 & 21 maintain their rejections, if the Applicant is respectfully advised that if a specific reason to implement additional components was intended it should have been claimed and not left to an inference from the specification as the Applicant has offered in support of arguing the rejection. The Examiner maintains the rejection as set forth in the Final Rejection for these claims.

Claims 3-6, 9 & 10 were rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Wildhagen and further in view of Zamiat. The Applicant appears to be arguing that because Zamiat teaches that Zamiat is utilizing the first group of Most Significant Bits, that this is different from the Applicant's invention. However Zamiat reads on "a most significant bit" because Zamiat provides for one MSB and then others, thereby reading on the claim. Therefore claim 3, and the analogous method claim 9, maintain their rejections.

Claim 4, is dependent on Claim 3 and the rejection stands for the forgoing reasons.

In regards to claim 5, the Applicant is arguing that the multiplicity issues between the Zamiat reference and the application's invention. If the Applicant wished to claim a single signal, a single digital representation or a single magnitude the applicant should have claimed that with words like "only one signal", "a single signal" etc. The Zamiat reference reads on a signal. Claim 5 and the analogous claim 10 have their rejections maintained.

Claim 6, is another multiplicity issue argued by the applicant that the Examiner refers the applicant to the above paragraph to see why this rejection too is maintained.

  
QUOCHIEN B. VUONG  
PRIMARY EXAMINER